

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A process for producing a polymer product cross-linked by silane where a polymer, a grafting agent, an initiator and a cross-linking catalyst and possible additives are fed into an extruder and extruded, whereafter the grafted material obtained is cross-linked using water and the catalyst for obtaining a cross-linked polymer product, in which process ~~the-a~~ grafting degree of the grafted material is controlled by an on line method, characterized by determining in the flow line after grafting ~~the~~ concentrations of the components affecting the grafting degree and based upon ~~the~~ results obtained, continuously adjusting ~~the~~ amounts of the components to be fed into the extruder in order to obtain the desired grafting degree, and determining a cross-linking degree of the cross-linked polymer product using a thermomechanical analyzer.
2. (Original) A process as claimed in claim 1, characterized by determining the concentrations by using IR spectrometry.
3. (Canceled)
4. (Canceled)
5. (Previously Amended) A process as claimed in claim 1, characterized by using a polymer, which is a polyethylene.
6. (Previously Amended) A process as claimed in claim 1, characterized by using a grafting agent, which is a silane compound.
7. (Original) A process as claimed in claim 6, characterized by using a silane compound, which is a vinyl trimethoxy silane.
8. (Previously Amended) A process as claimed in claim 1, characterized by using an initiator, which is a peroxide.

9. (Original) A process as claimed in claim 8, characterized by using dicumyl peroxide as an initiator.

10. (Currently Amended) A process as claimed in claim 1, characterized by using dibutyl tin dilaurate as a cross-linking catalyst.

11. (Currently Amended) A process as claimed in claim 1, ~~where the~~ characterized by forming a grafted product which is a cable or conductor insulation.

12. (Currently Amended) A process as claimed in claim 1, ~~where the~~ characterized by forming a grafted product which is a pipe.